# Tife STILT-BUGS (HETEROPTERA-NEIDIDAE) of the AUSTRALIAN and NEW ZEALAND REGIONS 

By gordon flinders gross, b.Sc., Snurif Autrralian Museum.

Fig, 1-1,

## INTRODUCTION.

'line material deseribed in this paper is in the eollections of the South Australian Muscum, Arlelaide, the Australian Museum, Sydner, and the British Musemm (Natural IIstory), London.

I am especially indebted to Dr. W. E. China of the Brilish Museum for arranging pxchangr of comparative material, and for ohservations and information on varions aspects of synonomy, in particular for his opinion that Mctutropis tipularius Dist. is synonymous with Capyella Lobutata Bergroth.

## Family NEIDIDAE Kirkaldy 1902.

Species slender and delicate with very long legs and autennae Apex of first segment of the antemae, and apices of the femoru, clavate; terminal segment of antemae enlarged and fusiform; antemac fommegmented and tarsi threesegmented. Head usually equipped with a tramsperse dursal sulcus immediately anterior to ocelli, and continned laterally to the hind margin of the cyes. Pronotum dorsally and laterally, und the subcoxae covered with a daised net-like reticulation enclosing polygonal pits or punctuations.

Of the six species which have been recorded from this area, the two Austridlian species are synonymous. Four species from Australia are herein deseribed as new, while two others, originally deseribed from India, ate now shown fo oceur in the Australasian region, making the total sumber of species eleven.

These insects are rare, and appear to frequent veretation near water, where the best method of eapture is by sweeping. Most species are to be found in high rainfall areas, though Protncanthus holfi sp. nov. seems rapable of living under sumiarid conditions.

## Key to Australian and New Zealand Genera.

1. Scutellum marmed, or provided with a simple keel or obtusely pointed nodule; head with a prominent "horn" located between the bases of the antenae and which may project forward horizontally to or past the tylus 2 Scutellum armed with a long suberect spine, which curves backward somewhat; head unarmed
2. Anterior pronotal margin "meate. Anstralian and Now Zaaland smemes dimorphice in both hemiclytra and wings, hachypterous form commonext Anterior pronotal margin conves, dimorphism does not ocen.
... ... ... .. .. . Crpyella Breddin 1902.
3. Odoriferous apertures provided with a process, which projects up above the level of the hemielytra; no anterior processes to the pronotum .. 4 Process of the odorilerous apertures not well developed or unduly produced; pronotum equipped with a spins near each antero-lateral angle
.. Prolacanthus lihler 1893.
4. Pronotnm equipped with three prominent tubereles posteriorly
(anmpsocoris luss 185:
Promotum erpuiphed with three obsolete fumescences posteriorly
5. Corium and clavis impunctate .- . Metacanthus Costat 1848.

Coriom impunctate, clavus punctate. . . Pneustocerus Horvath $190 \bar{\circ}$.

## Genus Neioes Latreille 1802,

Neides Latreille 1802, Hist. Nat. Crust. Ins. III, p. 246 . Logotype N. Liputerius (Limn) designated by Westwood 1840. A palacaretic species.
In addition to the synonomy cited by Van Duzee, 1917, Cat. Ilem. Am. Noh. of Mexico, pp. 14:-144, thare are the following reterences: Donglas and S'cott 1865, Brit. Hem. I, p. 160; Samuders 1892, Jem. Iteterop. Brit. Is.. p 61 ; Hedicke 1932, Mitt, deuts ent. (Tes, ó, p, 134.

Vertex of head equipped with a horn-lake profesin; the basal stagment of the rosterm does not reach the anterior ventral marein ol the pronotum; second segment of antemar lomger than the foneth. Anterion margin of the pronutum coneave; posterior two-thirds of the pronotum convesty raised in the maneropperons form, but flat and coplamar with anterior thited in the hrachypterns; both pronotum and ahdomen manmed. sentellum furushed with an whasely pointed norlule, and the process assoriated with the odoriterous apertures not well developed; or anduly prolonged.

In addition, the following tendent characters oreme; the hom-like process of tho vertex tends to project forward horizontally over the tylus, and in the European species to be equipped with a ventrally directed (and placed) simieimular lamina, but in Neides tusmumensis, the hom is very reduced, and inclined at an anglo of $45^{\circ}$ (fig. 1b) ; the eyes tend to lie midway between the anterion apex of the horm, and the anterior marem of the pronotam, but this is not so in $\Lambda$. lasmanimsis alue to the reduction of the horn, or in $\mathcal{N}$. maiponga due to an elongation of the postocellary portion of the head; the first segment of the rostrum tends to reach only to about the region of the anteocellary
sukns, but reaches nearly fo the anterior materin of the promotum in $\mathrm{N}_{\text {. }}$. fasmanionsis, and the rostrum itselli temds to reach only to the mid-cosae, but in N. tasmmenenis surpasses the mid-coxac.

D'terygopolymorphism is common and of two distine bypes; in the European species. the hemielytan are alwass longry than the abdomen, and never reduced in the brachypterons form ; in the Anstralian and New Zealand spectes, the hemielytra and wings in the matopterons condition nerer reach mach berond the middle of the abdomen (fig. 日a), while in the brachypterons form, both hemielytra and wings are considerably reduced (figs. 1 a, 2e), and the mombrane of the bomielytra is no more than a vestigial flap. Myers (1926) first recorded this secoud lype of dimorphism for $N$. walifficldi Bueh. White, and I have specimens in both conditions of $N$. mapontof, amoner which the Inaehypterons comdition predominates; the ouly three specimens of $N$. Iasmamifasis I have seen are brachypterous, thongh doubtless the macropterous form doos exist. This evidence supports Myer's statement that apparently brachyptery is the normal condition.

The gems is cosmopolitan and three speces, two of them new, are shown to neen in the Australian and New Zealand regions.

KEY TO SMEDE OH NETDES.

1. Itmielytea never shomend, always extending past the apex of the abdomen, wings may be shortened .... .. .. .. .. European species. Ildminlytra and wings emmonly shortmed, hut when fully devoloped, not extending much beyond the middle of the abdomen .... Australian and New Zealand species.
2. Cophalic how stromgly devolond, projecting forward horizontally owe the tylus; rostrum reaching mid-coxae .. .. .. .. . . 3 Cephatie hom very reduced and set at an angle of 45 ; rostrmm reaching hind cosae .. .. .. .. .. .. N. tasmaniensis sp. nov.
$\therefore$ Body thickly pilose above and below; cyes appoximately midway between anterior margin of pronotum and apex ut horn . . N. umFecfichli Buch. White. Body weakly pilose ahove and below; eyes much nearer to apex of eephatic horn than to anterior margin of pronotum ... .. N. maiponga sp nov.

Neides tasmanitensis sp, nov.
Fig. 1. a-b.
Colomation : testaceous; underside of head, last segment of antennae, distal half of last segment of rostrum, clistal ends of tibiae, tat'si and ventral sulens of thorax black; femora (except distal testaceous clubs), tibiac and fiest thres:
antemal segments (except distal chuls of liest, which are comeoloumbs with femoral chabs), transerse faseia om upper surface of the alofominal rounesivia, aud a central ventral abdominal faseia yellovish.

Structure: eyes somewhat nearer tylus than to for margin of prono-
 process on the glus; fostrum surpasses the mid-coxar, tirst segment mot quitw


 braclyTpterous made.
[rig. : M Metacanthus plufe; it-li, dursul and litural vicws thald.
Fig. 1. Protacunthus hateíg thy, dorsal ansi Iatornt viows temale。
reaching the anterior margin of prothorax, ratio of segments $9: 9 ; 7 \cdot 5: 7 \cdot 5$. Abdomen above and below, coarsely punctate.

Length $6 \cdot 5-7.5 \mathrm{~mm}$. Width 0.5 mm .
Mabitat. Tasmania: Hobart, 22.1.16, C. Cole; Launceston, 6 Sept., 1929, V. V. Hickman, "Under log". N. S. Wales: A. M. Lea.

Types: Ilolotype and paratype in collection of South Australian Museum (No. 1.200!5), allotype (No. K60:373) in collection of Australian Museum.

Neides wakeriet.di Buch. White 1878.
Ncides uakefithl Buchanan White 1878, Ent. Mom, May. 15, p. 31 ; IIutton 1897, Thans, N.Z. Inst. xxx, p. 172; Myers 1926, Trans. N.Z. Inst. 56, p. 485-6; Tillyard 1926, Ins. Aus. N.K., pp. 147-8, fig. Q5.
Colouration : testaceons; the side of the head and of the prostethium with a longitudinal brown lins.

Structure: the apical lamina (spine of vertex) of the head eylindrical, straight, gradnally narrowed to an obtuse point, and reaching far beyond the apes of the had, anteocular part of the hear subequal to the postocular.

In addition, the body is covered with a long whitish pubescence which readily distinguishts it from $N$. Lasmaniensis imd $N$. muiponga, in which only a Tery sparse pubsseence is present.

Length $7-8 \mathrm{~mm}$. Width 1 mm .
IIabitat. New Zealand: "Wellington, Wancanni, Canterburg, raro in the North Island, taken in December and April" (Myers).

Neides matponga sp. 110 v .
Fig. 2, a, b, c.
Colomation: testaccous; pronotum, spine on vertex of heat, femora (a broad brown hand on the apical clubs excepted), tibiae (apices excepted), first three sugments of antennae (a broad brown band on apical club of the first pacepted) a basal ant a distal hand on the fourth segment, a dorsal longitudinal line on head from between ocellf to anterio margin of pronotum, tylus and some contipuons areas of jugae, insertions of antennae and some transverse fasciat on the upper surface of abdominal "ommexivia yellowish. Other transserse fasciae on comnexivia, and a broad median bank on last segment of antemnae blackish brown. Eyes in life red.

Structure : Spine of vertex sparsely pilose and projecting forward to tylus; last segment of antemac clongately fusiform; rostrom reaching the intermodiate soxae, first segment reaching to about anteocellary suleas. Hemielytra
in macropterous form extending half-way down the length of the abdomen, but in the brachypterous form extending omly one-ninth the length of the abdomen.

Length 10.8 mm . Widtl 0.5 mm .
Habitat. South Australia: Myponga, from small swamp, G. K. Gross; Adelaide, 10th March, 1949, F. J. Mitchell; Cape Jervis area, from Acerith in creek, 27 th February, $1949, G$. F. Gross. Thasmaniat: New Norfolk, in tussock, A. M. Lea.

Types. Holotype (macropterons), allotype (macropterous), 1 maratype (macropterous), and 3 paratypes, 2 2,1 우 (brachypterous), in the eollection of the Surth Australian Museum (No, T.20026), :2 paratypus (brachypterous) in the British Musemm, and 1 paratype (brachypterons) in the Australian Musemu.

## Gemus Capyedta Breddin 1907.

Capyella Breddin 1907, Dewls. Ent. Zeit., p. 36 (Haplotype matacaipus (Stal) an African and Indian species). Bergrotb 1909, Ann. Sore. Ent. Belg. 53, p. 188-9.
C!apys stal 1865, Hem. Afr. 11, p. 119; Stal. 1874, Fnum Hem 1V, p. 128:
Lethierry and Screrin 1894, Cat. Hem. 11, p. 131. Distant 1908, Fann,
Brit. Ind. Rhynch, IV, p. 489 (pre-occupied by Capys Hewitson 1865, Lepidoptera).
Capytum Strand 1926, Arch. Naturg. 92, A8, 1. 47.
Head armed with porrect spiniform process, pronotum posteriorly depressed and furnished with an obtuse conical tuberele near cach lateral angle, mesosternmm, metasternum and first abdominal segment suleated, proeess of the odoriferous apertures apically emarginate (abbreviated from Stal).

In addition, the second segment of the antemme is longer than the fourth; thr anterior margin of the pronotum is sinuately convex, and the pronothm and the abdomen are marmed; the sentellum is furnished with a short obtusely pointed spine.

This genus is known from the Africau, Indian and Australian regions; there is one Anstralian species.

Capyella robulata Bergroth 1909.
Capyella Lobulata Bergroth 1909, Ann. Soc. Eut. Belg., 53, 188.
Mctatropis tipularius Distant 1911, Aun. Mag. Nat. Hist. (18), 7, (42), 585.
Colonation: testaceons; abdomen beneath pale yellow, with it marginal series of orhraceons spots; fourth segment of the antemae black with a white subbusal annulation.

Structure: the rostrum reaches the intermediate coxac, first segment suberinal to the second and thitd together, hasal margin of the pronotum produced into a rounded lobe above the hase of "ach coritum.

Length $8-9 \mathrm{~mm}$. Widtli 1 mm .
Differs from C. malacaipus (Stal) ( $=$ horni Breddin) and C. aracilis (Dist.), in the short rostrum which reaches only to the intermediate coxar, ant in the light underside of the abdomen.

Habitat. Northern Teruitory, Australin.
Types. Unique types of C. lobulata and Mctalropis tiputarius in the collection of tho British Museum; one damaged specimen (Melville Is., N.T., W. D. Dodd), in the collection of the South Anstralian Musenm.

## Gemus Metacantius Costa 1838.

Metacanthus Costa 1838, Cim. Regni Neap. Cent., 1, 27. (Haplotype M. meirdionale Costa, a European species). Beryroth 1914 Wien Enl. Zeil., xxxiii, 182.

Wegulomerium Fieber 185t, Wien. Eht, Monuts., 208; Fjeber 1861, Europ. Mem. 54 and 231; Lethierry and Severin 1894, Cat. Hem. II, 131; Oshanin 1906-9, Verz. Pal. Hem. I, 242.

Apex of head moderately subacutely produced, second and third segments of autennae subequal, rostrum reaching hind coxae. Pronotum twice as long as broad, with a distinct anterior collar, posterior two-thirds convex, and with a low central keel. Hemiclytra nearly reaching or surpassing the apex of abdomen, and the process of the odoriferons aperture is produced into an upwardly directed spine which surpasses the level of the hemielytra and is recurved backwards at the tip.

The genus is represented in Limope, Africa, Asia, Indonesia, New Gninea and Australia.

Key to Austrahian Speoles on methoanthus.

1. Species small (4-5 mm. long), yellowish . .. .. .. . 2 Species larger ( $7-8 \mathrm{~mm}$. long), dark brown .. .. M. pluto sp. nov.
2. First segment of antemnar, femora and tibiac with narrow brown or black ammulations
First segment of antenne, femora and tibiae mot ammlated $\ddot{M}$. pertenerus
(Bredd).
3. Specins 5 mm . long; annulations brown M. pertenerus wittatus subsp. nov. Species 4 mm , long; innmlations black ..
M. tenellus (Horvath)

Metacanthut mertenerus (Breddin 1907).
Vegalomerium pertenerum Breddin 1907, Deuts. Eut. Zeil. 37; Distant 1918, Faun. Brit. Ind. Rhyuch. VII, 176, fig. 89.
Colouration: very light yellow; the clavate distal ends of the first segment of the antennae and the femora, and the apices of the tibiae brownish; the two terminal segments of the tarsi, tip of the rostrum, and basal two-thirds of the last (fusiform) semment of the antennae black; terminal third of last an tennal segment white; eyes and dorsal surface of abdomen red.

Structure: first antennal segment somewhat shorter than segments two and three together, segment two longer than segment three, ratio $60: 35: 30: 10$.

Length 5 mm . Width 0.5 mm .
Habitat. India and Ceylon.

Metacanthus pertenerus vittatus subsp. nov.
This Australian variety differs from the typical Iudian, in that the first segment of the antennac, the femom, and the tibiat, are banded with narmw brown annulations, except on the clubbed distal ends of the first antemal segment and the femora, where there is a broad anmulation.

Habitat. Australia, Northern Torritory (nime specimens, Roper River, N. B. Tindale).

Types. Holotype, allotype and fou paratypes in the collection of the South Australian Museum (No. I.20027); three paratrpes in the eollnetion of the British Museum.

The underside of the abdomen in hoth subspecies, has a greenish tinge, indieating that it is probably grass green in life.

## Metacantims tenelous (Iorvath) 190.


Whitish testaceous; head palely reddish testaceous, smooth, vertex seen from the side not very convex, almost subhorizontal, tylus produced; the lisit segront of the antemae remotely and narrowly anmulated with black towards the base, apex lightly clubbed and somewhat infuseated, fourth serment black. apex white; pronotum densely and fincly punctate on almost its entire surfuce, two small basal obsolete callosities on the anterior lobe however. are smooth, the lateral margins of the posterion lobe are parallel; the spine on the sentellum is subvertical, shorter than the posterior margin of the pronotum with an acute
apex; hemielytra just surpassing the apex of the ablomen; thorax ventrally punctate; legs narrowly and remotely anmulated with black; femora lightly clavate and somewhat infuscated at the apex, tarsi apically black.-Horvath.

Length 4 mm .
This species differs from $M$. pertenerus in its smaller size and darker colomation; as however I have not seen this specios, I am mable to say whether it is also a subspecies of the "pertenerus" group, in which case, as it is the prior species, M. pertenerus and M. pertenerus vittatus wonkl fall under its synonomy as subspecies.

Hubitat. New Guinea, Madang (Friedrich Wilhelmshafen),
Metacanthus pluto sp. hov.
Fig, 3, a-lo.
Colonation: redelisls brown; fasciae behind the eyes, pronotum in the vicinity of anterior dorsal callositios, and regions above the anterior subcoxae laterally, sentelhm and its spine, thoracie sternites, dorsal surface and portions of ventral surface of tho abdomen, tips of tibiae and tarsi, darker brown to blackish brown ; hasal two-thirds of last segment of antemae black, apical third white.

Structure: Ratio of antennal segments 60:36:29:8, vertex of head fairly convex, beell nearer eyes than to each other; first segment of the rostrum reaching about to the anteocellary sulcus.

Length 7-8 mm. Width 1 mm .
This large dark species contrasts sharply with the other small yellowish species in this genus, and in size and overall colouration, superficially resembles Capyella malucaipus and O. lobulata,

It appeas to be closely related to Pheustocerus nigricornis Horvath and $P$. bremepina IIonath, in dimonsions and colouration, but it only differs from Jorvath's deseription of Paeustmeres in not having the punctate clavis. Strnethally it also dows not difine signifiantly from the other species of Metacanthus.

Tt appears that there is need for some clarification of the status of Phenstorerus liorvath.

Habitat. Qucensland; Bunya Mts., 2,000-3,000 ft., 24.12.37, N Geary; Magnetie Is., A. M. Lea. N. S. Wales: TTpper Williams River, Oct., 1925, Lea and Wilson.

Typas. Holotype and allotype in the collection of the Australian Museum, Syilner; two paratypes in the collertion of the South Australian Museum (No. [.20028), and one paratype in the collection of the British Museum.

Genus I'Neustronerus Horrath 1905. Pneustocerus Horvath 1905, Ann, Mus. Not. Hung., IIl (1), 59.
(Ilaplotype $P^{3}$. Higmicornis llorvath, a New Guinea species).
Body strongly elongated. Head unamed; vertex tumidly elevated. marked oft from tyhas by a transerse impression. Ocelli more remote from "ach other than from eyes. Antemac slenter, very long, longer than body: first segment subequal to the subsequent segments in length, apex clavate, socond segment a little lomger than third, fouth segment narmw, elongate, and fusiform. Rostrum reaching posterior enxac, basal segment half length of head. Pronotum anteriorly truncate, posteriorly lightly simuate, constrictol towards front, convex, angles not prominent, posterior margin attemuate and demressed, modian ked obsolete and disappearing posteriorly, humeral ingles hardly tumesernt. Neutellum armed with a long erect spine. Hemolytra complete, clavis punctate, corium impunctate. Odoriferous orifices furnished with a long erect process, whose apex is sharply turned back. Legs very long: femora aphomaly elivate, posturior femora surpassing the apex of the abdomen. Venter impune. tate. (Horvath).

The genus has species in New Guinea and Borneo.
Pneustocerus nigricornis Iforvath 1905.
Pncustocerus nigricornis Morvath 1905, Ann. Nat. Mus. Hung., LII, (1), in.
Reddish-testaccous; head smooth, impunctate, often a Iateral obsolete postocular fuscus band is present, vertex strongly convex; antennae black, first segment breoming pale at hase, apex lightly clavate, apical half of the fourth sugment white; promotum densely and distinctly punctate, provided with a shomoth tramsverse subapical callosity, sides moderately romeded; spine on the subtellim straight, vertical, equal to half the posterior margin of the pronotum, apex acute; hemielytia a little shorter than abdomen, extending to apex of pemitimate dorsal segment; process of odovifurons urifices becoming black at the apex; clubs of femora, tibiae, and tarsi black, (Horvath).

Length $8-9 \mathrm{~mm}$.
Habitat. New Guinea.
I have not seen this species or any member of its genns.
Genus Gampsocoris Fuss 1852.
Vimmparoris Fuss 18ine, Mith. Ver. Hormenstadl 7, (Maplotype G. Inemetipes (Cermar), a Emropern species), Bergroth 1914, Wien Ent. Zevi, xxxiii. 182.

Metacanthus Costa 1848, Atti. An. Nap. VTi, 258; Fieber 1859, Wein Ent. Monats. © 09 ; Fieber 1811, Ehrop. Hem. 213; Douplas and Scott 1865, Brit. Hem. I, 115; Saunders 1892, Hem. IIet. Brit. Is., 15; Lethierry and Severin 1894, Cat. Hem. II, 132; Distant 1902, Faun. Brit. India, Rhynch. I, 422.

Armanus Mulsant and Rey 1870, Pun. France, Cor. 187.
Vertex of head raised and convex, second and third segments of antemnae subergal, pronotum not twice as long as broad, convexly raised and trituberculate posteriorly, clarus very short, and apical margin of the corium very long. Scutellum equipped with a long curved spine, process of the odoriferons apertures neither strongly produced nor surpassing the level of the hemielytra in G. pronetipes, lint is strongly produced, and surpasses the level of the hemielytra in ${ }^{\text {G }}$ pulchellus.

The gents is cosmopolitan, there is mly one species in this region.

Gampsocoris pulohellus (Dallas) 1852.
Mrteremthus pulchellus Dallas 1852, List. Hem. II, 490; Distant 1902, Faun. Brit. India, Rhynch. I, 243, fig. 248.

Colouratiom: pale yellow, tending brownish in some specimens; first three serments of the antennae, femora, and tibiae with numerous brown or black annulations: chlubs of femora tips of tibiae and two terminal tarsal segments brown.

Structure: Promotum with anterior margin convex and without tubereles, but with thren whitish tubercles forming a transverse line on the dorsal surface above the for coxae (homologons with the callous area in this position in other species of Nridids). Process of the odoriferons apertures prolonged into int upwardly directed proeess, which surpasses the level of the hemielytra (as in species of Metreanthus-this is not shown in Distant's figure),

Lengilh $3.5-4.5 \mathrm{~mm}$, Width 0.75 mm .
Habitat India, Java, New Guinea (Misima 1s.), Australia (Darwin). The Darwin species are somewhat paher than the fodian and Misima Is speciแย:งก.

There are eleven specimens (two Darwin, G. F. Hill, and nine Misima Is., Papha, Kev. 11. K. Battlett) in the collection of the South Australian Musemm, and fontr sperimens (two of the Darwin series and two of the Misima series) in the collection of the British Musemm.

Genius Protacanthus Thler 1893.
Prolacanthus Whler 1893, Proc. Zool. Soc. London, 707, (Haplotype P. decorus Uhler, a West Indian species). China 1930, Ins. Samoa I1, fasc. B, 111. Auchenoplus Bergroth 1913, Mem. Soc. Ent. Belgique, 22, 179.

Rustrum reaching posterior coxae, basal segment not as long as head, second aml third segments of antemnar subequal. Pronotum anteriorly armed on each side with an obliquely directed spine and equipped with a prominent central keel and trituberculate posteriorly. IIemielytra longer than abdomen, which tapers from base to apex. Scutellum armed with a prominent spinc, process of the odoriferous apertures not prolonged vertically above the level of the hemielytra.

Has species in the West Indies, Polynesia, Australia and India,

## Protacantius pacificus China 1930.

Protacanthus pacificus China 1930, Ins. Samoa 11, fosc. 3 111, fig. ${ }^{2}$.
Anterior lobe of head (in front of neclli) and cyes intense shining black, remainder fulpous, flecked with brown. Pronotum fulvous auteriorly and shading through brown to black posteriorly, ubdomen pale green.

Head with a few short hairs, especally at apex of rostrum, reaching almost to second abdominal segment, relative lengths of segments, $35: 17=20: 29$. Ifumeral augles of pronotum sub-globosely swollen, the median longitudinal keel on dise very distinct posterionty, strongly elevated between the tmmescent humeral lobes and dilated to form an elongate lobe-like protusion. Spines of anterior collar robust, about as long as head is wide between eyes. Hamielytrat axtending well beyond the apex of the abdomen. (Abbreviated from China).

Length 4 mm . Width 0.72 mm .
Habitat. Samoa and Fiji.

## Protacantius halei sp, nov.

Fig. 4, a-b.
Colouration: light yellowish brown; thoracie stemites brown; last semment of antennae, tip of rostrum, terminal two tarsal segments and a longitudinal line on imer prolongation of each corium black.

Structure : first segment of autemae slightly shorter than next two together, ratio of segments, $35: 20: 20: 9$; vertex thmescently carinate, head with seat-
tered hairs, especially on the erown of carina of vertex and tylus. Pronotum with a low upwardly and ontwardly directed spine on each antero-lateral margin, (ratio of spine length to anterior width of pronotum is $1: 6$ ), and with three nodules, one on each lateral carina and the other (laminate and procurved in side view) on the central keel, all threc directly above the fore coxae in position. Abdomen impunctate, hind femora surpassing apex of hemielytia.

Length $3 \cdot 5-4.5 \mathrm{~mm}$. Width 0.5 mm .
This species differs from $P$. pueificus China, in not having black om either the head or the pronotum, and in the shorter rostrum and pronotal spinss, ant from I'. bithmatus Dist. in not having black on the head, and in the shorter pronotal spines.

IFabitat. South Australia: (Mooloolor, $2,000 \mathrm{ft}$., Flinders lianges, Northern South Australia 1921, II. M. ILate).

Types: Holotype and allotype in the collection of the South Australian Museum (No. I.20029).

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